

Penulisan Jurnal / Karya Tulis dengan \LaTeX



oleh
Adhi Susilo, PhD

Kuliah Tamu Daring
Universitas Sains dan Teknologi Komputer
(Universitas STEKOM)

21 Januari 2021

- 1 Pendahuluan
 - Apa itu \LaTeX ?
 - Sejarah \LaTeX
 - *Pro et Contra*
- 2 \LaTeX untuk Siapa?
- 3 Bekerja dengan \LaTeX
 - *Installing* \LaTeX
 - *Running* \LaTeX
- 4 Kesimpulan dan Saran
- 5 Referensi
- 6 Penutup

Menurut definisi dari Ref.[3]:

- \LaTeX adalah sistem persiapan dokumen untuk cetak dengan kualitas tinggi.
- Contoh hasil \LaTeX ¹:

¹dari Ref.[5], hal.119

Menurut definisi dari Ref.[3]:

- L^AT_EX adalah sistem persiapan dokumen untuk cetak dengan kualitas tinggi.
- Contoh hasil L^AT_EX¹:

Aaaaaaarshe shouted, but not
even the next ong in line noticed that some-
thing terrible had happened to her.

¹dari Ref.[5], hal.119

Menurut definisi dari Ref.[3]:

- L^AT_EX adalah sistem persiapan dokumen untuk cetak dengan kualitas tinggi.
- Contoh hasil L^AT_EX¹:

Aaaaaaarg she shouted, but not
even the next ong in line noticed that some-
thing terrible had happened to her.

- L^AT_EX bukan sebuah **word processor**!

¹dari Ref.[5], hal.119

\TeX

- sebagai “mesin”-nya
- dari huruf Yunani: $\tau\epsilon\chi\nu\eta$
- yang berarti: *art*, *skill*, atau *technique*
- untuk para *designer* dokumen / pola dokumen (*template*)
- dibangun oleh Donald Knuth di tahun 1978
- Knuth disebut juga “bapak dari analisis algoritma”.

²seperti yang ditulis di Ref.[3].

T_EX

- sebagai “mesin”-nya
- dari huruf Yunani: $\tau\epsilon\chi\nu\eta$
- yang berarti: *art*, *skill*, atau *technique*
- untuk para *designer* dokumen / pola dokumen (*template*)
- dibangun oleh Donald Knuth di tahun 1978
- Knuth disebut juga “bapak dari analisis algoritma”.

Bapak T_EX

Donald Ervin Knuth



Donald Knuth at a reception for the [Open Content Alliance](#), October 25, 2005

Born	January 10, 1938 (age 77) Milwaukee, Wisconsin , US
Nationality	American
Fields	Mathematics Computer science
Institutions	Stanford University

²seperti yang ditulis di Ref.[3].

\LaTeX

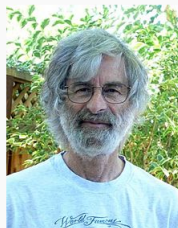
- sebagai “*interface*”
- dibangun oleh Leslie Lamport di tahun 1985
- untuk para penulis (*user*).

L^AT_EX

- sebagai “*interface*”
- dibangun oleh Leslie Lamport di tahun 1985
- untuk para penulis (*user*).

Bapak L^AT_EX

Leslie Lamport



Born February 7, 1941 (age 74)
New York City, New York

Fields Computer science

Institutions Microsoft Research
Compaq
Digital Equipment Corporation
SRI International

Cons

Cons

- bukan WYSIWYG (**W**hat **Y**ou **S**ee **I**s **W**hat **Y**ou **G**et)

Cons

- bukan WYSIWYG (**W**hat **Y**ou **S**ee **I**s **W**hat **Y**ou **G**et)
- sepertinya membosankan, karena tipe huruf sama atau *plain text*.

Pros

^a<https://www.health.harvard.edu/alzheimers-and-dementia/what-can-you-do-to-avoid-alzheimers-disease> (diakses 05/01/2021).

Pros

- gratis

^a<https://www.health.harvard.edu/alzheimers-and-dementia/what-can-you-do-to-avoid-alzheimers-disease> (diakses 05/01/2021).

Pros

- gratis
- *plain text* = *size* dokumen kecil

^a<https://www.health.harvard.edu/alzheimers-and-dementia/what-can-you-do-to-avoid-alzheimers-disease> (diakses 05/01/2021).

Pros

- gratis
- *plain text* = size dokumen kecil
- cocok untuk segala bidang

^a<https://www.health.harvard.edu/alzheimers-and-dementia/what-can-you-do-to-avoid-alzheimers-disease> (diakses 05/01/2021).

Pros

- gratis
- *plain text* = size dokumen kecil
- cocok untuk segala bidang
- tidak memikirkan format

^a<https://www.health.harvard.edu/alzheimers-and-dementia/what-can-you-do-to-avoid-alzheimers-disease> (diakses 05/01/2021).

Pros

- gratis
- *plain text* = *size* dokumen kecil
- cocok untuk segala bidang
- tidak memikirkan format
- dapat menangani *file* kecil atau besar

^a<https://www.health.harvard.edu/alzheimers-and-dementia/what-can-you-do-to-avoid-alzheimers-disease> (diakses 05/01/2021).

Pros

- gratis
- *plain text* = *size* dokumen kecil
- cocok untuk segala bidang
- tidak memikirkan format
- dapat menangani *file* kecil atau besar
- mengurangi risiko *Alzheimer disease* atau pikun^a

^a<https://www.health.harvard.edu/alzheimers-and-dementia/what-can-you-do-to-avoid-alzheimers-disease> (diakses 05/01/2021).

Yang membutuhkan \LaTeX :

Yang membutuhkan \LaTeX :

- kaum akademisi saja?

Yang membutuhkan \LaTeX :

- kaum akademisi saja?
- kaum matematikawan saja?

Yang membutuhkan \LaTeX :

- kaum akademisi saja?
- kaum matematikawan saja?
- adalah **siapa saja!**

Yang membutuhkan L^AT_EX:

- kaum akademisi saja?
- kaum matematikawan saja?
- adalah **siapa saja!**

Contoh bidang ilmu yang memerlukan L^AT_EX (dipilih secara acak):

- Ilmu Komputer
- Kimia
- Sastra
- Musik

Dengan paket **flowchart** dari A.P. Robson:

Sebelum diolah

```
1 \begin{tikzpicture}[>=latex',font={\sf \small}]
2
3 \def\smbwd{2cm}
4
5 \node (terminal1) at (0,0) [draw, terminal,
6   minimum width=\smbwd,
7   minimum height=0.5cm] {START};
8
9 \node (predproc1) at (0,-1.5) [draw, predproc, align=left,
10  minimum width=\smbwd,
11  minimum height=1cm] {GET\ DATA};
12
13 \node (decide1) at (0,-3.5) [draw, decision,
14  minimum width=\smbwd,
15  minimum height=1cm] {C$<$3};
16
17 \node (storage1) at (0,-5.5) [draw, storage,
18  minimum width=\smbwd,
19  minimum height=1cm] {STORE};
20
21 \node (process1) at (3,-5.5) [draw, process,
22  minimum width=\smbwd,
23  minimum height=1cm] {PROCESS};
24
25 \coordinate (point1) at (0,-6.75);
26
27 \node (terminal2) at (0,-7.75) [draw, terminal,
28  minimum width=\smbwd,
29  minimum height=0.5cm] {END};
30
31 \draw[>] (terminal1) -- (predproc1);
32 \draw[>] (predproc1) -- (decide1);
33 \draw[>] (decide1) -| node[above]{YES} (process1);
34 \draw[>] (decide1) -- (storage1);
35 \draw[>] (process1) |- (point1);
36 \draw[>] (storage1) -- (point1) -- (terminal2);
37
38 \end{tikzpicture}
```

Dengan paket **flowchart** dari A.P. Robson:

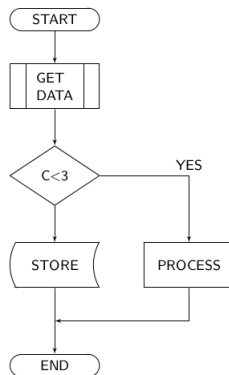
Sebelum diolah

```

1 \begin{tikzpicture}[>=latex',font={\sf \small}]
2
3 \def\smbwd{2cm}
4
5 \node (terminal1) at (0,0) [draw, terminal,
6   minimum width=\smbwd,
7   minimum height=0.5cm] {START};
8
9 \node (predproc1) at (0,-1.5) [draw, predproc, align=left,
10  minimum width=\smbwd,
11  minimum height=1cm] {GET\ DATA};
12
13 \node (decide1) at (0,-3.5) [draw, decision,
14  minimum width=\smbwd,
15  minimum height=1cm] {C<$3};
16
17 \node (storage1) at (0,-5.5) [draw, storage,
18  minimum width=\smbwd,
19  minimum height=1cm] {STORE};
20
21 \node (process1) at (3,-5.5) [draw, process,
22  minimum width=\smbwd,
23  minimum height=1cm] {PROCESS};
24
25 \coordinate (point1) at (0,-6.75);
26
27 \node (terminal2) at (0,-7.75) [draw, terminal,
28  minimum width=\smbwd,
29  minimum height=0.5cm] {END};
30
31 \draw[>-] (terminal1) -- (predproc1);
32 \draw[>-] (predproc1) -- (decide1);
33 \draw[>-] (decide1) --| node[above]{YES} (process1);
34 \draw[>-] (decide1) -- (storage1);
35 \draw[>-] (process1) |- (point1);
36 \draw[>-] (storage1) -- (point1) -- (terminal2);
37
38 \end{tikzpicture}

```

Sesudah diolah



Dengan paket **tikz** dari Jürgen Hackl, 2018.

- Contoh berikut dari situs tanya-jawab (diakses 06/01/2021):

<https://tex.stackexchange.com/questions/303277/tikz-transitions-around-whole-automaton>

Sebelum diolah

```
\documentclass[border=3mm,tikz]{standalone}
\usetikzlibrary{automata}

\begin{document}
\begin{tikzpicture}[>=stealth, node distance=2.7cm, auto]
  \node[state, initial, accepting] (I) {} (SIS);
  \node[state] (p) [above right of = I] (SPS);
  \node[state] (q) [right of = p] (SQ);
  \node[state] (r) [below right of = I] (SR);
  \node[state, accepting] (F) [below right of = q] (SFS);

  \path[>-]
    (I) edge node {a} (p)
    edge node {b} (r)
    (p) edge node {b} (q)
    edge [swap, bend right] node {abc} (F)
    (q) edge [bend left] node {abc} (F)
    edge [swap, bend right] node {c} (F)
    (r) edge node {abc} (F)
    edge [swap, bend right] node {c} (F);
\draw[red, thick, >-] (I) |- ([yshift=-5mm] r.south) -| (F);% <-- added
\end{tikzpicture}
\end{document}
```

Dengan paket **tikz** dari Jürgen Hackl, 2018.

• Contoh berikut dari situs tanya-jawab (diakses 06/01/2021):

<https://tex.stackexchange.com/questions/303277/tikz-transitions-around-whole-automaton>

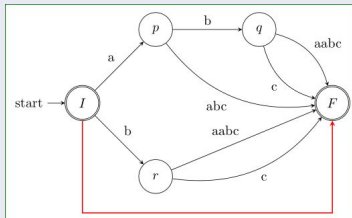
Sebelum diolah

```
\documentclass[border=3mm,tikz]{standalone}
\usetikzlibrary{automata}

\begin{document}
\begin{tikzpicture}[>stealth, node distance=2.7cm, auto]
  \node[state, initial, accepting] (I) {} (SIS);
  \node[state] (p) [above right of = I] (SPS);
  \node[state] (q) [right of = p] (SQS);
  \node[state] (r) [below right of = I] (SRs);
  \node[state, accepting] (F) [below right of = q] (SFS);

  \path[>-]
    (I) edge node {a} (p)
    edge node {b} (r)
    (p) edge node {b} (q)
    edge [swap, bend right] node {abc} (F)
    (q) edge [bend left] node {aabc} (F)
    edge [swap, bend right] node {c} (F)
    (r) edge node {aabc} (F)
    edge [swap, bend right] node {c} (F);
\draw[red, thick, >-] (I) |- ([yshift=-5mm] r.south) -| (F); <-- added
\end{tikzpicture}
\end{document}
```

Sesudah diolah



Dengan paket **tikz** dari Jürgen Hackl, 2018.

• Contoh berikut dari situs tanya-jawab (diakses 06/01/2021):

<https://tex.stackexchange.com/questions/303277/tikz-transitions-around-whole-automaton>

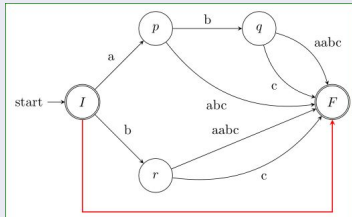
Sebelum diolah

```
\documentclass[border=3mm,tikz]{standalone}
\usetikzlibrary{automata}

\begin{document}
\begin{tikzpicture}[>=stealth, node distance=2.7cm, auto]
  \node[state, initial, accepting] (I) {} (SIS);
  \node[state] (p) [above right of = I] (SPS);
  \node[state] (q) [right of = p] (SQS);
  \node[state] (r) [below right of = I] (SRs);
  \node[state, accepting] (F) [below right of = q] (SFS);

  \path[>-]
    (I) edge node {a} (p)
    edge node {b} (r)
    (p) edge node {b} (q)
    edge [swap, bend right] node {abc} (F)
    (q) edge [bend left] node {aabc} (F)
    edge [swap, bend right] node {c} (F)
    (r) edge node {aabc} (F)
    edge [swap, bend right] node {c} (F);
  \draw[red, thick, >-] (I) |- ([yshift=-5mm] r.south) -| (F); <-- added
\end{tikzpicture}
\end{document}
```

Sesudah diolah



Info lanjut tentang diagram (diakses 06/01/2021)

- Tikz-Network Manual: <https://arxiv.org/pdf/1709.06005.pdf>
- Contoh diagram: <https://texample.net/tikz/examples/tag/diagrams/>

Ada beberapa paket, misal:

- Paket **mhchem**, dibuat oleh Martin Hensel
- Paket **XYMTEX**, dibuat oleh Shinsaku Fujita.

Ada beberapa paket, misal:

- Paket **mhchem**, dibuat oleh Martin Hensel
- Paket **XYMTEX**, dibuat oleh Shinsaku Fujita.

Paket mhchem

Chemical Equations



```
\ce{CO2 + C -> 2 CO}
```

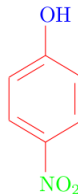


```
\ce{Hg^2+ ->[I-] HgI2
->[I-] [Hg^{II}I4]^2-}
```

Paket **XYMTEX**

```
{\red \bzdrv{1=={\blue OH};4=={\green NO$_{2}$}}}
```

produces the following colored structure:

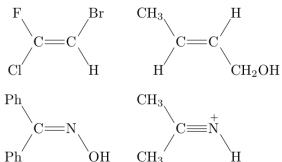


Paket XYMT_{EX}

Ethylene derivatives are drawn by the codes:

```
\Ethyleneh{1==C;2==C}{1==F;2==Cl;3==H;4==Br}\quad
\Ethyleneh{1==C;2==C}{1==CH$_{3}$;2==H;3==CH$_{2}$OH;4==H}\par
\Ethyleneh{1==C;2==N}{1==Ph;2==Ph;3==OH}\quad
\Ethyleneh[t{2+}]{1==C;2==N}{1==CH$_{3}$;2==CH$_{3}$;3==H}
```

which produce the following structures:



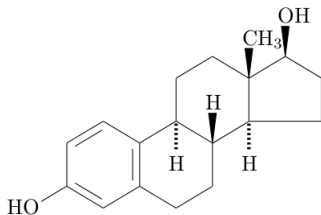
Paket X_YM_TE_X

As examples of aromatic compounds, benzene derivatives are drawn by the following codes:

```
\bzdrv{1==OH}  
\bzdrv{2==OH}  
\bzdrv[r]{1==OH}  
\bzdrv[l]{1==OH}  
\bzdrv[A]{1==OH}
```

These commands produce:



Paket **XYMTEX**

estra-1,3,5(10)-triene-3,17 β -diol
estradiol

```
\steroid[ack]{3==HO;{17}B==OH;%  
8B==H;9A==H;{13}B==CH$_{3}$;{14}A==H}
```

Tidak mengherankan banyak paket untuk bidang ini:

- Paket untuk Puisi

- **altverse** → untuk menulis *verse*
- **verse** → untuk menulis *verse* sederhana
- **gmverse** → untuk menulis puisi
- **poetrytex** → untuk menulis antologi puisi.

• Paket untuk *Screenplay*

- **drama** → untuk menulis naskah panggung untuk produksi
- **dramatist** → untuk menulis drama, dalam *verse* dan prosa
- **plari** → untuk menulis naskah panggung
- **play** → untuk menulis drama
- **screenplay** → untuk menulis naskah film
- **ScriptTeX** → untuk menulis naskah biasa atau naskah film
- **stage** → untuk menulis naskah panggung.

• Paket untuk *Typeset*

- **sffms** → untuk menulis naskah *science action/fantasy*
- **memoir** → untuk menulis puisi, *action*, *non-action*, dan *mathematical works*
- **gamebook** → untuk menulis *game books* dan novel-novel interaktif.

Beberapa contoh pemakaian:

- Dengan paket **dramatist**

Sebelum diolah

```
\scene[. -- Franconia.]

\StageDir{\begin{center} Apartment in the Castle of
COUNT MOOR.\\fran, \moor\end{center}}

\begin{drama}
\franspeaks But are you really well, father?
You look so pale.

\moorspeaks Quite well, my son -- what have
you to tell me?

\franspeaks The post is arrived -- a letter
from our correspondent at Leipsic.

\moorspeaks \direct{eagerly}. Any tidings of my son
Charles?

\franspeaks Hem! Hem! -- Why, yes. But I fear
-- I know not -- whether I dare -- your health.
-- Are you really quite well, father?
[...]
\end{drama}
[...]
```

Beberapa contoh pemakaian:

- Dengan paket **dramatist**

Sebelum diolah

```
\scene[. -- Franconia.]

\StageDir{\begin{center} Apartment in the Castle of
COUNT MOOR.\\fran, \moor\end{center}}

\begin{drama}
\franspeaks But are you really well, father?
You look so pale.

\moorspeaks Quite well, my son -- what have
you to tell me?

\franspeaks The post is arrived -- a letter
from our correspondent at Leipsic.

\moorspeaks \direct{eagerly}. Any tidings of my son
Charles?

\franspeaks Hem! Hem! -- Why, yes. But I fear
-- I know not -- whether I dare -- your health.
-- Are you really quite well, father?
[...]
\end{drama}
[...]
\end{document}
```

Sesudah diolah

SCENE I. – FRANCONIA.

*Apartment in the Castle of COUNT
MOOR.*

FRANCIS, OLD MOOR

FRANCIS But are you really well, father? You look
so pale.

OLD MOOR Quite well, my son – what have you to
tell me?

FRANCIS The post is arrived – a letter from our cor-
respondent at Leipsic.

OLD MOOR (*eagerly*). Any tidings of my son Charles?

FRANCIS Hem! Hem! – Why, yes. But I fear – I
know not – whether I dare – your health. – Are
you really quite well, father?

- Dengan paket **poetrytex**

Sebelum diolah

```
\usedefaulttitles
\useincipits
\renewcommand*{\ptdefaulttitle}{%
  Untitled \textnumero\
  \arabic{absoluteuntitledpoemnum}%
}
\begin{poem}{}{Traditional}
\incipit{Media vita in morte%
  sumus};\\*
Quem qu\ae rimus adiutorem nisi%
  te, Domine?\\*
Qui pro peccatis nostris juste%
  irascaris\\*
Sancte Deus, Sancte fortis,%
  Sancte et misericors
  Salvator,\\*
Amar\ae morti ne tradas nos.
\end{poem}
```

- Dengan paket **poetrytex**

Sebelum diolah

```
\usedefaulttitles
\useincipits
\renewcommand*{\ptdefaulttitle}{%
  Untitled \textnumero\
  \arabic{absoluteuntitledpoemnum}%
}
\begin{poem}{}{Traditional}
\incipit{Media vita in morte%
  sumus};\*
Quem qu\ae rimus adiutorem nisi%
  te, Domine?\*
Qui pro peccatis nostris juste%
  irascaris\*
Sancte Deus, Sancte fortis,%
  Sancte et misericors
  Salvator,\*
Amar\ae morti ne tradas nos.
\end{poem}
```

Sesudah diolah

Untitled № 1

Traditional

Media vita in morte sumus;
 Quem quærimus adiutorem
 nisi te, Domine?
 Qui pro peccatis nostris
 juste irascaris
 Sancte Deus, Sancte fortis,
 Sancte et misericors Sal-
 vator,
 Amaræmorti ne tradas nos.

- Dengan paket **tikz** dapat dibuat *fancy verse*:

- Dengan paket **tikz** dapat dibuat *fancy verse*:

- gambar diputar 90°-

"Fury said to
 a mouse, That
 he met
 In the
 House,
 Let us
 both go
 to law:
 I will
 prosecute
 you.
 Come, I'll
 take no
 denial;
 We must
 have a
 trial: a
 really
 this
 morning
 I've got
 nothing
 to do to
 the
 said
 person
 in
 such a
 trial;
 With no
 dear sir,
 I'll be
 judge;
 I'll be
 jury,
 Said
 cunning
 old Fury;
 'I'll try
 the whole
 cause,
 and
 condemn
 to
 death.' "

- Paket **MusiXTEX**, dibuat oleh Daniel Taupin (Perancis), Ross Mitchell (Australia), dan Andreas Egler (Jerman).

Sebelum diolah

```
\hspace=100mm
\generalmeter{\meterfrac24}%
\parindent 0pt
\generalsignature{-3}
\startpiece\bigaccid
\Notes\qu{ce}\en\bar
\Notes\qu{gh}\en\bar
\Notes\qu{=b}\en
\Notes\ds\cu g\en\bar
\Notes\qu{~f=f}\en\bar
\Notes\qu{=e}\itied0e\qu{e}\en\bar
\Notes\ttie0\Qqbu edf_d\c\en\bar
\Notes\ibu0b{-2}\qb0{=b}\enotes
\notes\nbbu0\qb0{=a}\tqh0N\enotes
\Notes\Qqbu cf\en\bar
\Notes\upertext{\it tr}\qu e\upertext{\it tr}\qu d\en\bar
\Notes\qu c\qp\en\Endpiece
```

- Paket **MusiXTEX**, dibuat oleh Daniel Taupin (Perancis), Ross Mitchell (Australia), dan Andreas Egler (Jerman).

Sebelum diolah

```
\hspace=100mm
\generalmeter{\meterfrac{24}}%
\parindent 0pt
\generalsignature{-3}
\startpiece\bigaccid
\Notes\qu{ce}\en\bar
\Notes\qu{gh}\en\bar
\Notes\qu{=b}\en
\Notes\ds\cu g\en\bar
\Notes\qu{~f=f}\en\bar
\Notes\qu{=e}\itied0e\qu{e}\en\bar
\Notes\ttie0\Qqbu edf_d\c\en\bar
\Notes\ibu0b{-2}\qb0{=b}\enotes
\notes\nbu0\qb0{=a}\tqh0N\enotes
\Notes\Qqbu cf\en\bar
\Notes\upxtxt{\it tr}\qu e\upxtxt{\it tr}\qu d\en\bar
\Notes\qu c\qp\en\Endpiece
```

Sesudah diolah



- L^AT_EX sudah tersedia di Linux.
- *Install* L^AT_EX di **Windows**:
 - **Catatan**: proses *installing* harus urut: “mesin” L^AT_EX dulu, kemudian T_EX editor, jangan dibalik!
 - *Download* dan *install* “mesin” L^AT_EX: MiKTeX (MiKTeX 20.12 muncul pada 14/12/2020)
 - Kunjungi situs MiKTeX (diakses 05/01/2021):
<https://miktex.org/download>
 - *Download* dan *install* sebuah T_EX editor³
 - Kunjungi situs TeXstudio (diakses 05/01/2021):
<https://www.texstudio.org/>

³semua editor bisa dipakai menulis, tetapi lebih nyaman jika kita menulis L^AT_EX dengan T_EX-editor, misal TeXstudio.

- Ketik dokumen dengan editor (misal Notepad) atau T_EX-editor.
- Eksekusi dokumen tersebut (extensi *file .tex*).
- Jika dengan *command line* ketik: **pdflatex filename.tex** lalu tekan *enter*.
- Menghasilkan *output pdf* jika tidak ada *error*.

- Jika tidak memakai L^AT_EX

2. FORMAT GUIDE

The following formatting rules must be followed strictly. This (.doc) document may be used as a template for papers prepared using Microsoft Word. Papers not conforming to these requirements may not be published in the conference proceedings.

2.1. General Format, Page Layout and Margins

Standard A4 (210mm x 297mm) portrait page set-up should be used. The left, right, top and bottom margins should be 30mm. Do not use any headers, footers or footnotes. No page numbers. Single column. All main text paragraphs, including the abstract, must be fully (left and right) justified. All text, including title, authors, headings, captions and body, will be Times New Roman font.

2.2. Title

The title is to be written in 20 pt. Garamond font, centred and using the bold and “Small Caps” formats. There should be 24 pt. (paragraph) spacing after the last line.

2.3. Authors

Author names are to be written in 13 pt. Times New Roman format, centred and followed by a 12pt. paragraph spacing. If necessary, use superscripts to link individual authors with institutions as shown above. Author affiliations are to be written in 12 pt. Times New Roman,

- Saatnya menulis dengan L^AT_EX



Gambar diambil dari

http://www.technicalcourses.net/portal/en/cursos/cursos_ficha.php?curso_id=10, diakses 02/01/2021. Sebuah kursus L^AT_EX daring 120 €/20 jam.

Kesimpulan

Kesimpulan

- $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ *is fun and free!*

Kesimpulan

- \LaTeX is fun and free!
- Kita dapat membuat kreasi sendiri, ada banyak pilihan.

Kesimpulan

- $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ *is fun and free!*
- Kita dapat membuat kreasi sendiri, ada banyak pilihan.
- Kita tinggal menulis, format sudah disediakan.

Contoh (diakses 05/01/2021): ada **14599** simbol tersedia di <http://tug.ctan.org/info/symbols/comprehensive/symbols-a4.pdf>

Kesimpulan

- $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ *is fun and free!*
- Kita dapat membuat kreasi sendiri, ada banyak pilihan.
- Kita tinggal menulis, format sudah disediakan.
Contoh (diakses 05/01/2021): ada **14599** simbol tersedia di
<http://tug.ctan.org/info/symbols/comprehensive/symbols-a4.pdf>
- Mengasah otak.

Kesimpulan

- \LaTeX is fun and free!
- Kita dapat membuat kreasi sendiri, ada banyak pilihan.
- Kita tinggal menulis, format sudah disediakan.
Contoh (diakses 05/01/2021): ada **14599** simbol tersedia di <http://tug.ctan.org/info/symbols/comprehensive/symbols-a4.pdf>
- Mengasah otak.

Saran

- Mulai sekarang pakailah \LaTeX untuk menulis, agar perintah-perintah di \LaTeX tidak lupa, dan agar terbiasa berpikir sebelum bertindak.

- ① S. Fujita, “XYMTEx (Versions 5.00) for Typesetting Chemical”, 2010.
- ② M. Hensel, “The mhchem Bundle”, 2015.
- ③ Latex Project, <https://www.latex-project.org/>, diakses 02/01/2021.
- ④ LPO, “An introduction to LaTeX”, <https://latex-project.org/intro.html>
- ⑤ T. Oetiker, “The Not So Short Introduction to LaTeX”, <https://tobi.oetiker.ch/lshort/lshort.pdf>
- ⑥ A.P. Robson, “The flowchart Package”, 2015.
- ⑦ D. Taupin, R. Mitchell, A. Egler, “MusixTEX”, 2011.
- ⑧ S. Whited, “The poetrytex Package”, 2014.
- ⑨ Wikibooks, LaTeX, <https://en.wikibooks.org/wiki/LaTeX>
- ⑩ Wikipedia, LaTeX, <https://en.wikipedia.org/wiki/LaTeX>

TERIMA KASIH

- Presentasi ini dibuat dengan **L^AT_EX** dan **Beamer** -

Jika ada pertanyaan, bisa disampaikan sekarang atau saat simulasi.